

August 25, 2016

Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street SW, Room TW-A325
Washington, DC 20554

Re: New Part 4 of the Commission's Rules Concerning Disruptions to Communications

Dear Marlene H. Dortch:

I would like to comment on the Amendments to Part 4 of the Commission's Rules Concerning Disruptions to Communications, PS Docket No. 15-80, ET Docket No. 04-35, PS Docket No. 11-82, Report and Order, Further Notice of Proposed Rulemaking, and Order on Reconsideration (FCC 16-63).

1. Subject matter expertise

I built and managed an Internet Service Provider (ISP) nation-wide network serving dozens of public library systems, with hundreds of branches and millions of library patrons throughout the U.S. and Canada. Dealing with telecommunication outages are a normal part of the business, including fiber cuts and carrier equipment failures. Although that ISP network was a relatively small T-3, 45 megabits per second, backbone; the customers were 24 different states requiring leased circuits from all major interstate exchange carriers and many local exchange carriers. Even though the ISP was small, it was impacted by outages in carriers all over the country.

In the early 1990's, the commercial Internet was still very young. The FCC did not collect outage reports about the Internet yet. Between 1994 and 1999, I began posting outage reports on the North American Network Operators Group (NANOG) mailing list, asking if anyone else had the same problem. I often got responses from other ISPs, and even engineers at other carriers, that they were also seeing problems but weren't able to get information about the cause either. After several years, some ISP engineers recognized my role tracking outage information and jokingly gave me an award of a golden backhoe (i.e. backhoes frequently cut fiber cables).

2. Service performance and outage information is important for efficient markets

Related to the FCC's questions raised NPRM is making information available to customers (and the public, competitors, etc.) about service performance metrics and outages is important to efficient markets.

It may be natural that commercial carriers don't like to publicize their problems. It's bad for their business. However, asymmetric knowledge often favors service provider. It's difficult for customers to learn about service quality problems, until after they've bought and paid for the service. Higher performing carriers will likely be in favor of more transparency, lower performing carriers will likely be in favor of less transparency.

Anecdotal reporting is helpful, but there is a need for accurate information market-wide. Government agencies, especially regulatory agencies, often perform the industry role of collecting and analyzing market-wide information. The National Transportation Safety Board analyzes and publishes reports about transportation accidents, with industry assistance. The Nuclear Regulatory Commission analyzes and publishes reports about nuclear plants and the nuclear industry, with industry assistance. The Securities Exchange Commission requires publicly traded companies file regular reports, which the SEC publishes through EDGAR. Efficient market operation depends on access to this information.

For example, the Department of Transportation, Bureau of Transportation Statistics made the market more efficient by collecting on-time information from all airlines, and all flights and made it publicly available. It would be extremely difficult for a third-party to collect on-time information for all flights, at all airports. DOT didn't need to create extensive time table accuracy rules or try to regulate the service airlines delivered. DOT just collected and reported the facts about airline on-time performance. Airlines fixed the time tables and adjusted their service after customers could see how often the airline schedules were wrong.

3. Historical FCC service quality data collection and reporting

The Federal Communications Commission used to collect and publish substantial industry-wide service quality and outage information, with the assistance of industry. As the FCC deregulated various parts of the telecommunications industries, it eliminated most industry-wide service quality reporting and made outage information confidential. Sometimes competitors used the information to embarrass each other about poor performance or failures. But that information and information was also important to keeping the market efficient. Corporate embarrassment shouldn't be a reason for confidentiality. Regulators, customers and competitors need the information to identify underserved areas, common industry problems and make purchasing and business decisions.

4. Waiting until after a disaster to identify systemic weaknesses

The market will correct, and sometimes over correct, after a disaster occurs. But before a critical failure, there are precursors and indicators. The damage from an earthquake or tsunami may be considered an Act of God, but the lack of facility diversity or backup power is a business decision.

The market can't react to the precursors, unless the information is collected and available in the marketplace. The FCC should not substitute its opinion for decisions made by businesses and customers. But the FCC can help with the analysis of problem indicators, service degradation, and lack of diversity. When the information is available, industry can decide how to fix them, instead of industries current response "that was a surprise, who could have predicted that would happen." Other carriers might view service problems in an area as an opportunity to compete in that market, which may be a reason why the incumbent carrier in an area doesn't want increased transparency about problems. By collecting and publishing industry-wide service performance and outage information the FCC does not need to set service quality levels or service resiliency requirements. Just like the DOT on-time statistics, the market will decide what levels are competitive when buyers have access to performance and quality information.

5. How quickly after an outage must reports be filed?

If the FCC intends to be an active coordinator during communication outages, then rapid notification deadlines make sense so the FCC can immediately respond. However, if the FCC intends to limit its role to regulatory actions months or years later, then longer filing deadlines make sense so carriers can provide a complete analysis of an outage.

Far more important than notifying the FCC, carriers must keep impacted customers informed throughout a disruption or outage. This includes critical government customers such as FAA aircraft control facilities, 911 Public Safety Answering Points, military and civil defense facilities, etc. The Department of Homeland Security National Coordinating Center for Communications leads emergency communications response and recovery efforts under Emergency Support Function #2 of the National Response Framework. The rapid sharing of information between responding carriers, the NCC and government customers is important. However, those communications should not be interpreted as regulatory filings. As carriers diagnose problems and coordinate responses, often the information is incomplete, incorrect or ambiguous. Technicians may try different things to identify a problem, and sometimes make things better or worse. The uncertainty in situational awareness experienced during a crisis is normal. As a

government participant in the NCC, the FCC can obtain situational awareness without requiring a separate regulatory filing.

After significant (definition of significance will vary, much like SEC's definition of "material") disruptions or outages are resolved, carriers should file with the FCC the results of their investigation or analysis of the incident in 30 days (typical) or 90 days (complex incidents). The report should not be confidential, but may request confidential treatment for some appendices. The FCC should critically review requests by carriers for confidential treatment. Corporate embarrassment shouldn't be a reason for confidentiality. Generally, the purpose of outage reports should be information sharing and improving industry reliability. Although enforcement actions may be appropriate in some cases, it should not be the primary regulatory purpose of outage reports.

If you have any questions concerning these comments, please do not hesitate to call (703-892-1810) or email (sean@donelan.com) me.

Respectfully submitted,

Sean Donelan